# PART U-4 EMERGENCY RESPONSE

WAC 296-307-452 Introduction. What is the purpose of WAC 296-307-452, Emergency response to hazardous substance releases rule (agriculture)?

To state the requirements that help you protect the safety and health of your employees during response to a hazardous substance releases in any workplace or location.

# Does this rule apply to your workplace?

Use this chart to determine if your workplace is covered by this rule. Key words are *italicized* and defined, following the chart.

Place illustration here.

\*The flow chart references other rules applicable to your workplace depending on conditions and hazards. Examples include:

- ₩ WAC 296-62-400, Hazardous chemicals in laboratories
- ₩ WAC 296-62-071, Respiratory protection

# Definitions:

# Danger area

Areas where conditions pose a serious danger to employees, such as  $[\ 2\ ]$  OTS-5355.4

areas where:

- ## Immediately dangerous to life or health (IDLH) conditions could exist
- # High levels of exposure to toxic substances could exist

OR

\*\* There is a potential for exceeding the lower explosive limit (LEL) or lower flammability limit (LFL) of a substance.

## Emergency response

A response to an anticipated release of a hazardous substance that is, or could become, an *uncontrolled release*.

## Hazardous substance

Any biological, radiological, or chemical substance that can have adverse effects on humans. (See WAC 296-307-46000 for a more specific definition.)

# Immediately dangerous to life or health (IDLH)

Any atmospheric condition that would:

- ₩ Cause an immediate threat to life
- # Cause permanent or delayed adverse health effects
- # Interfere with an employee's ability to escape

## Incidental release

A release that can be safely controlled at the time of the release and does not have the potential to become an *uncontrolled release*.

Example of a situation that results in an incidental release:

A tanker truck is receiving a load of hazardous liquid when a leak occurs. The driver knows the only hazard from the liquid is minor skin irritation. The employer has trained the driver on procedures and provided equipment to use for a release of this quantity. The driver puts on skin protection and stops the leak. A spill kit is used to contain, absorb, and pick up the spilled material for disposal.

# Limited action

Action necessary to:

## Secure an operation during emergency responses,

OR

# Prevent an incident from increasing in severity.

Examples include shutting down processes and closing emergency valves.

# Release

A spill, leak, or other type of hazardous substance discharge.

## Uncontrolled release

A release where significant safety and health risks could be created. Releases of hazardous substances that are either incidental or could not create a safety or health hazard (i.e., fire, explosion or chemical exposure) are not considered to be uncontrolled releases.

Note: 
#Examples of conditions that could create a significant safety and health risk:

- Large-quantity releases
  - Small-releases that could be highly toxic
  - Airborne exposures that could exceed a WISHA permissible exposure limit or a published exposure limit and employees are not adequately trained or equipped to control the release.

# Example of an uncontrolled release:

A forklift driver knocks over a container of a solvent-based liquid, releasing the contents onto the warehouse floor. The driver has been trained to recognize the vapor is flammable and moderately toxic when inhaled. The driver has not been trained or provided appropriate equipment to address this type of spill. In this situation, it is not safe for the driver to attempt a response. The driver needs to notify someone of the release so

an emergency response can be initiated.

## Workplace

₩ A fixed facility

OR

₩ A temporary location (such as a traffic corridor)

OF

# Any other site where an emergency response occurs.

## Summary

## Your responsibility:

To anticipate, plan for, and manage emergency response operations so employees are protected from hazardous substances and conditions.

**Note:** In addition to this rule, rules in other chapters apply to your workplace, such as:

Chapter 296-62 WAC, General occupational health standards

You will find some safety and health requirements (for example, personal protective equipment) are addressed on a general level in the core rules, while being addressed for a specific application in this rule. When this happens, both requirements apply and should not conflict.

If you find that requirements appear to conflict, the requirement that better protects the employee's safety and health must be followed to comply with this rule. Contact your local L&I office if you need assistance in making this determination.

## You must:

WAC 296-307-45210 Planning

WAC 296-307-45220 Training

WAC 296-307-45230 Medical surveillance

WAC 296-307-45240 Keep records

WAC 296-307-45400 Incident requirements

WAC 296-307-45410 Implement and maintain an incident command system (ICS) (incident command system)

WAC 296-307-45420 Prepare skilled support personnel

WAC 296-307-45430 Make sure the incident commander oversees activities during the response

WAC 296-307-45440 Use the buddy system in danger areas

WAC 296-307-45450 Provide rescue and medical assistance

WAC 296-307-45600 Personal protective equipment

WAC 296-307-45610 Control hazards created by personal protective equipment (PPE)

WAC 296-307-45620 Use personal protective equipment (PPE) properly

WAC 296-307-45800 Postemergency response

WAC 296-307-46000 Definitions.

# NEW SECTION

WAC 296-307-45210 Planning. Develop an emergency response plan.

\*\* You may already have an emergency response plan, such as required by chapter 296-62 WAC, Part P, Hazardous waste operations and treatment, storage and disposal facilities or by state and locally coordinated response efforts (Section 303 of Superfund Amendments and Reauthorization Act (SARA), Title III). You may use those plans to comply with this section, if they include the items listed below.

\*\* Before a written emergency response plan can be developed, you will need to anticipate the types of uncontrolled releases that employees could encounter in your workplace(s).

# You must:

- (1) Make sure your plan is written and adequately addresses at least all of the following:
- ## Preemergency planning and coordination with additional responders (including personnel from other employers such as: Fire departments, law

enforcement agencies, emergency medical services, and state or federal agencies).

- ## Personnel roles, and lines of authority and communications for all affected parties including responders
- ## Employee training (see WAC 296-307-45220, train your employees), for more detail:

Note

- ## Training should address the competencies specified in Tables 3 through 5, as indicated for the employee's role.
- \*\* Training geared for specific substances may be appropriate for some responders depending on how many hazardous substances are expected to be encountered, and their characteristics. For example, if employees may only respond to one substance, you could provide training (covering the knowledge and skills specified in Tables 3 through 5) relevant to that single substance. On the other hand, if employees might respond to a range of hazardous substances, training may be required to cover categories of hazardous substances.
- ## Emergency recognition
- ## Immediate emergency procedures including:
- Methods of alerting employees (see WAC 296-307-345, Employee alarm systems)
  - Procedures for limited action (emergency prevention)

**Note:** *Limited action* includes shutting down processes, closing emergency valves and other critical actions to secure the operation, or prevent the incident from increasing in severity.

Limited Action and Employee Roles			
If	Then employees involved		
	would be:		
Limited action could be conducted in the danger	Considered emergency responders		
area			
Limited action will not be conducted in IDLH	Considered evacuees, not emergency responders		
conditions			

- Details of who will evacuate immediately and who will remain behind for limited action
  - Evacuation routes and procedures
- How to establish safe distances and places of refuge (during emergency response the incident commander (IC) decides to make changes based on new developments, i.e., changes in the wind direction).
  - ₩ Methods of securing and controlling access to the site
  - ₩ Emergency medical treatment and first aid
- $\ensuremath{\text{\#}}$  A complete personal protective equipment (PPE) program that addresses:
- Selection of PPE including selection criteria to be used and the identification, specified use and limitations of the PPE selected.
  - Training on proper use of PPE (including maintenance).
- Hazards created by wearing PPE including heat stress during temperature extremes, and/or other appropriate medical considerations.
  - Criteria used for determining the proper fit of PPE.
- Procedures covering proper use of PPE including procedures for inspection, putting it on (donning) and removing it (doffing).
- $\,$  Maintenance of PPE including procedures for decontamination, disposal and storage.
  - Methods used to evaluate the effectiveness of your PPE program.

# If a manufacturer's printed information or WISHA rule adequately addresses procedural requirements (such as donning or doffing for PPE), it is not necessary to rewrite this into your program; simply attach the printed information.

- \*\* You may use written procedures provided by the equipment manufacturer when they meet the requirements of other rules, including chapter 296-62 WAC, Part E, Respiratory protection.
- ## Emergency equipment
- ## Decontamination procedures determined by a hazardous materials specialist or other qualified individual
- Methods to critically assess the response and conduct appropriate follow-up

## You must:

(2) Make your written emergency response plan available to employees, [5] OTS-5355.4

their representatives, and WISHA personnel for inspecting or copying.

In situations where multiple employers could respond to an incident, all plans should consistently address:

Who will be designated as the incident commander (IC)

AND

# If, when, and how transfer of the incident commander (IC) position will take place.

# NEW SECTION

# WAC 296-307-45220 Training.

Train your employees

Note: 
\*\* Skilled support employees as described in Table 1, are not covered by the training requirements in this section (see WAC 296-307-45420).

- ## You may conduct training internally, or use outside training services to comply with this section.
- When outside trainers are hired, you are still responsible for making sure the requirements of this section are met. For example, employers may compare the course outline to the competencies listed in Tables 3, 4 and 5.
- ## Use Tables 1through 5 to identify your employee's emergency response roles and training competency levels.

# You must:

 $\mbox{\tt \#}$  Make sure employees are appropriately trained for their assigned roles and duties as follows:

# -Initial training:

₩ Provide initial training before the employee is allowed to participate in an actual emergency response operation.

**Note:** When first responders at the awareness or operations level have sufficient experience to objectively demonstrate competencies specified in Table 3, you may accept experience instead of training.

- Make sure initial training adequately addresses the competencies listed in Tables 3, 4 and 5 and the minimum training durations in Table 2.
- ## Certify that employees objectively demonstrate competencies specified in Tables 3, 4 and 5 (except for employees trained as first responders at the awareness level).

# - Retraining (refresher) training:

- ## Provide retraining annually
- # Make sure retraining covers necessary content
- ₩ Document training or demonstrated competency

Note: Retraining is not required when employees demonstrate competencies annually and a record is kept of the demonstration methodology used.

# - Trainer qualifications:

Werify trainers have satisfactorily completed an instructors' training course for the subjects they teach. For example, courses offered by the United States National Academy, or equivalent courses are acceptable.

OR

 $\ensuremath{\mathit{\#}}$  Have the educational and instructional experience necessary for training.

# - Specialist employees:

## Specialist employees who have been sent to the scene to advise or assist must receive training or demonstrate competency in their specialty, annually.

Table 1 Roles and Duties of Emergency Responders		
If the employee's role is:	Th	ey:
First responder at the awareness level	****	Are likely to witness or discover a hazardous substance release
	AND	
		Are trained to initiate an emergency response by notifying the proper authorities of the release

		AND
	(4)	Take no further action beyond notifying the authorities
First responder at the operations level	((0))	Respond to actual or potential releases in order to protect nearby persons, property, and/or the environment from the effects of the release AND
	(4)	Are trained to respond defensively, without trying to stop the release
		AND
	₩	May try to:
		- Contain the release from a safe distance
		- Keep it from spreading
		- Protect others from hazardous exposures
Hazardous materials technician		Respond to releases or potential releases, with the intent of stopping the release
	40	AND
	***	Are trained to approach the point of release offensively in order to, either:
		- Plug
		- Patch
		- Stop the release using other methods
Hazardous materials specialist		Respond along with, and provide support to, hazardous materials technicians  AND
	(6)	Are required to have more specific knowledge of hazardous substances than a
		hazardous materials technician  AND
	(4)	Act as the site activity liaison when federal, state, local, and other government authorities participate
Incident commander		Have ultimate responsibility for:
		- Direction
		- Control
		- Coordination of the response effort
Specialist employee		Are a technical, medical, environmental, or other type of expert
	43	AND
		Represent a hazardous substance manufacturer, shipper, or a government agency.  AND
	(4)	May be present at the scene or may assist from an off-site location
		AND
	(4)	Regularly work with specific hazardous substances
	I	

1	1	
		AND
	***	Are trained in the hazards of specific substances
		AND
	***	Are expected to give technical advice or assistance to the incident commander
		or incident safety officer, when requested
Skilled support personnel	((•))	Are needed to perform an immediate, specific emergency support task at the
		site
		AND
		Are skilled in the operation of equipment including:
		<ul> <li>Earth moving equipment</li> </ul>
		- Cranes
		<ul> <li>Hoisting equipment</li> </ul>
Incident safety officer	***	Are designated by the incident commander
		AND
	(1)	Are knowledgeable in operations being implemented at the site
		AND
		Have specific responsibility to
		- Identify and evaluate hazards
		- Provide direction on employee safety matters

Table 2 Minimum Training Duration for Responders			
If you are a:	Then you must have a minimum of:		
First responder at the operations level	8 hours training (see Table 3)		
Hazardous materials technician	24 hours training (see Table 4)		
Hazardous materials specialist	24 hours training (see Table 4)		
Incident commander	24 hours training (see Table 5)		

Table 3 Competencies for First Responders			
Employees must be able to show they:	When they are designated as First Responders at the:		
	Awareness Level	Operations Level	
Understand what hazardous substances are and their associated risks.	X	X	
Recognize the presence of hazardous substances in an emergency.	X	X	
Can identify the hazardous substances, when possible.	X	X	
Understand the potential consequences of hazardous substances in an emergency.	X	X	

Understand the role of a first responder at the awareness level as described in:  When The employer's emergency response plan, including site security and control.  When The United States Department of Transportation's	X	X
Emergency Response Guidebook. (search at:		
http://www.dot.gov).		
Know how to use The United States Department of Transportation's Emergency Response Guidebook.	X	X
Recognize the need for additional resources and the need to notify the incident's communication center accordingly.	X	X
Know basic hazard and risk assessment techniques.		X
Can select and use personal protective equipment (PPE) appropriate for first responder operations level.		X
Understand basic hazardous materials terms.		X
Can perform basic control, containment, and/or confinement operations within the capabilities of the resources and PPE available.		X
Can implement decontamination procedures to their level training.		X
Understand relevant standard operating and termination procedures.		X

Table 4			
Competencies for Hazardous Materials Technicians and Hazardous Materials Specialist			
Employees must be able to show they:	When they are designated as a Hazardous Materials:		
	Technician	Specialist	
Have the competencies specified for the first responder operations level. (See Table 3)	X	X	
Know how to implement an employer's emergency response plan.	X	X	
Can function within their assigned role in the incident command system.	X	X	
Understand hazard and risk assessment techniques.	X	X	
Understand basic chemical and toxicological terminology and behavior.	X	X	
Can use field survey instruments and equipment to classify, identify, and verify materials at the incident.	X	X	
Can select and use personal protective equipment (PPE) appropriate for hazardous materials technicians.	X	X	
Can perform advance control, containment, and/or confinement operations within the capabilities of the resources and PPE available.	X	X	
Can implement decontamination procedures to their level of training.	X	X	
Understand termination procedures.	X	X	
Can implement the local emergency response plan.		X	
Know of the state emergency response plan.		X	

Can develop a site safety and control plan.	X
Understand chemical, radiological, and toxicological	X
terminology and behavior.	
Understand in-depth hazard and risk techniques.	X
Can use advanced survey instruments and equipment to	X
classify, identify and verify materials at the incident.	
Can select and use proper specialized chemical PPE given to	X
hazardous materials specialists.	
Can perform specialized control, containment, and/or	X
confinement operations within the capabilities of the resources	
and PPE available.	
Can determine decontamination procedures.	X

Table 5			
Competencies for Incident Commanders and Specialist Employees			
Employees must be able to show they:	When they are designated as a(n):		
	Incident Commander	Specialist Employee	
Have competencies specified for the First Responder Operations Level (see Table 3).	X		
Know of the state emergency response plan and the Federal Regional Response Team.	X		
Can implement the local emergency response plan.	X		
Can implement the employer's emergency response plan.	X		
Have knowledge of the incident command system (ICS) and understand how they relate to it.	X		
Can implement the employer's ICS.	X		
Understand the hazards and risks associated with employees working in chemical protective clothing.	X		
Understand the importance of decontamination procedures.	X		
Have current knowledge in their field regarding safety and health practices relating to specific hazardous substances.		X	
Have the knowledge of the ICS and understand how the relate to it.		X	
Understand the care and use of personal protective equipment (PPE).		X	

WAC 296-307-45230 Medical surveillance. Provide medical surveillance to employees.

# You must:

- (1) Provide medical surveillance for employees to comply with Tables 6 and 7, and the following:
  - Make medical surveillance available at:
  - Reasonable times and places.

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- No cost to employees, including travel associated costs such as mileage, gas or bus fare if the employee is required to travel off site

#### ANT

- $\,$  Wages for additional time spent outside of employees normal work hours.
- $\mbox{\em M}$  Make sure a licensed physician performs or supervises exams and procedures.
  - ## Give complete information to the examining physician including:
  - A copy of this rule.
- $\,$  A description of the employee's duties that relate to hazardous substance exposure.
  - The hazardous substance exposure levels anticipated for the employee.
- A description of the personal protective equipment (PPE) the employee could use.
  - Information available from previous medical examinations.
- The medical evaluation information required by chapter 296-62 WAC, Part E, Respiratory protection.
  - Medical exams must include, at a minimum:
  - A medical history
  - A work history (or updated history if on file)
  - A special emphasis on an:
  - Assessment of symptoms related to handling hazardous substances
  - Health hazards
- ② Evaluation of fitness for duty (including the ability to wear any personal protective equipment (PPE) or other conditions that may be expected at the workplace)
  - Other content as determined by the examining physician.
    - Note: The physician should consult the Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (see OSHA website: http://www.osha.gov).
- (2) Obtain the physician's written opinion and give a copy to the employee that includes:
- ## A statement of whether or not medical conditions were found which would increase the employee's risk for impairment during emergency response work or respirator use.
- Do not include specific findings or diagnoses unrelated to occupational exposures.
  - S Limitations recommended to the employee's assigned work, if any.
  - ® Exam and test results if the employee requests this information.
- $\ \textcircled{\ \ }$  A statement that affirms the employee has been confidentially informed of medical exam results (including medical conditions requiring follow-up).

Table 6				
Medical Surveillance for Employee Categories				
If the employee is covered by this rule and is:	You must:			
<ul> <li>Exposed for at least 30 days a year to health hazards or hazardous substances at or above the permissible exposure limit or published exposure levels (even when respirators are used),</li> <li>OR</li> <li>Required to wear a respirator for at least 30 days a year.*</li> </ul>	*** Offer standard medical surveillance as specified in Table 7.*			
A hazardous materials (HAZMAT) team member  A hazardous materials specialist	** Provide standard medical surveillance as specified in Table 7.			
* An emergency responder who shows immediate or	** Provide incident-specific medical surveillance as			
delayed signs or symptoms possibly resulting from exposure to hazardous substances during an incident.	specified in Table 7.			

- **\*\*** Not an emergency responder and:
  - May be injured
- Shows immediate or delayed signs or symptoms possibly resulting from exposure to hazardous substances
- May have been exposed to hazardous substances at concentrations above the permissible exposure limits (PELs) or the published exposure levels without appropriate PPE.

\*\* Offer incident-specific medical surveillance as specified in Table 7.

\*Note: A medical evaluation for respirator use is required by chapter 296-62 WAC, Part E, Respiratory protection, for those employees who have not been cleared for respirator use during medical surveillance act ivities.

Table 7 Frequency of Exams and Consultations		
If the employee is covered by:	Then medical surveillance must include:	
₩ Standard medical surveillance	₩ Exams and consultations:	
	Before assignment.  Note:If the employee is a hazardous materials (HAZMAT) team member or a hazardous materials specialist, the employee must receive a baseline physical examination.	
	<ul> <li>At least once every 12 months after their</li> </ul>	
	initial assignment unless the physician believes a	
	shorter, or longer interval (but no more than 24 months)	
	is appropriate.	
	<ul> <li>Whenever employees are reassigned to an</li> </ul>	
	area where they will no longer be covered by medical	
	surveillance and they have not been examined within	
	the past 6 months.	
	<ul> <li>As soon as possible after an employee</li> </ul>	
	reports:  † Signs or symptoms of possible	
	overexposure to hazardous substances or health hazards  † Injury	
	Exposure above the permissible exposure	
	limits or published exposure levels	
	– At the termination of their employment	
	unless they were examined within the past 6 months.	
₩ Incident-specific medical surveillance	₩ Medical consultations and exams:	
	<ul> <li>As soon as possible following the incident or</li> </ul>	
	development of signs or symptoms.	
	<ul> <li>At additional times, if the physician</li> </ul>	
	determines follow-up is medically necessary.	

# NEW SECTION

WAC 296-307-45240 Keep records.

# You must:

- ₩ Keep a record of:
- $\mbox{-}$  Name and Social Security number of the employee receiving medical surveillance
- Physicians' written opinions, recommended limitations, and results of examinations and tests
  - Any employee medical complaints regarding hazardous substance

#### exposures

- A copy of all information given to the examining physician (except a copy of this rule).

## NEW SECTION

WAC 296-307-45400 Incident requirements. Recognize emergencies and initiate a response

## You must:

- $\mbox{\em M}$  Make sure employees follow procedures in your emergency response plan to:
  - Recognize when an emergency response must be initiated
  - Notify employees, and others designated in your plan, of the release
  - Follow immediate emergency procedures
- $\,$  Prevent the incident from increasing in severity or to secure the operation.

## NEW SECTION

WAC 296-307-45410 Implement and maintain an incident command system (ICS).

# You must:

- (1) Make sure a single individual, acting as the incident commander (IC), is in charge of the site-specific incident command system (ICS) and acts within their designated role and training level.
  - **Note: \*\*** For multiemployer worksites:
    - The IC has responsibility for controlling emergency response operations at the site for all employers.
    - Emergency response plans should be consistent in designating who assumes IC position.
    - ## If the first employee arriving at the scene is not trained as an IC (see Table 5, Training Requirements for Incident Commanders and Specialist Employees, WAC 296-824-11020), they may take control of the incident within their designated role and training level.
- (2) Make sure all employers' emergency responders and their communications are coordinated and controlled by the IC.

**Note:** The IC may delegate tasks to subordinates (within their training level).

- (3) Make sure each employer at the scene has designated a representative to assist the IC.
- (4) Establish security and control of the site as specified in your written emergency response plan.

# NEW SECTION

WAC 296-307-45420 Prepare skilled support personnel. Note: The duties of skilled support personnel are described in Table 1, Roles and Duties of Emergency Responders.

# You must:

Make sure that your skilled support personnel (including those employees who are not regularly employed by you) who could be exposed to onscene hazards are given an initial briefing at the site before they

participate in any emergency response. The initial briefing must include:

- What chemical hazards are involved
- What duties are to be performed
- Instruction in the wearing of appropriate personal protective equipment

**Note:** Skilled support personnel do not need to comply with the other training requirements of this rule.

Make sure the safety and health precautions given to your employees are also given to skilled support personnel.

# NEW SECTION

# WAC 296-307-45430 Make sure the incident commander oversees activities during the response. The employer of the incident commander (IC) must:

- (1) Identify all hazardous substances and conditions present, within their training level, using site analysis and maximum exposure limits, when appropriate.
- (2) Implement emergency response procedures appropriate to the hazardous substances and conditions present, such as:
- # Procedures that address the use of engineering controls, hazardous substance handling, and new technologies
  - ## Procedures that address decontamination
  - # Procedures that address PPE
- $\mbox{\#}$  Procedures that limit the number of personnel to those who are actively performing emergency response operations, in areas where exposure could exist.
  - (3) Designate an incident safety officer (ISO).
- $\mbox{\tt M}$  Make sure the ISO demonstrates knowledge about operations being implemented at the emergency response site. They must:
  - Identify and evaluate hazards
- Communicate with the IC about hazards, immediately informing the IC of corrective actions that must be taken when conditions are judged to be:
  - † An imminent danger

OR

- † Immediately dangerous to life or health (IDLH).
- Provide direction about the safety of operations.

## NEW SECTION

# WAC 296-307-45440 Use the buddy system in danger areas.

## You must:

## Make sure operations and tasks (including limited actions) in danger areas are conducted using the buddy system in teams of two or more.

# Definition:

Danger areas are areas where conditions pose a serious danger to employees, such as areas where:

 $\mbox{\tt \#}$  Immediately dangerous to life or health (IDLH) conditions could exist.

OR

## High levels of exposure to toxic substances could exist.

OR

## There is a potential for exceeding the lower explosive limit (LEL) or lower flammability limit (LFL) of a hazardous substance.

## NEW SECTION

## WAC 296-307-45450 Provide rescue and medical assistance.

#### You must:

(1) Provide stand-by employees equipped with the same level of personal protective equipment (PPE) as the entrants, for assistance or rescue.

Note:

\*\* The buddy system applies to stand-by employees (WAC 296-307-45440).

AND

**\*\*** One of the two stand-by employees can be assigned to another task provided it does not interfere with the performance of the stand-by role.

AND

## Rescue equipment should be selected and provided based on the types of rescue situations that could occur.

#### You must:

(2) Make sure employees trained in first aid are readily available with necessary medical equipment and have a way to transport the injured.

Note

- **\*\*** Employee training is covered by the first-aid rule, WAC 296-800-150. This rule requires training on the eighteen subjects listed in addition to any subjects that are specific to your workplace emergency hazards (for example: If exposure to corrosive substances could occur, training would need to include first-aid procedures for treating chemical burns).
- **\*\*** Employers who designate and train their employees to provide first aid are covered by the bloodborne pathogens rule, WAC 296-62-08001.

# NEW SECTION

# WAC 296-307-45600 Personal protective equipment.

Note:

- \*\* Only properly trained employees should select PPE. Hazardous materials technicians and hazardous materials specialists can select PPE within the competencies specified in Table 4.
- Selection requirements in other PPE rules also apply, including:
- Chapter 296-62 WAC, Part E, Respiratory protection.
- Chapter 296-305 WAC, Safety standards for fire fighting.

# You must:

- Provide employees with appropriate PPE and make sure it is used if hazards could be present.
- Select PPE (such as respirators, gloves, suits and other PPE) based on:
- † An evaluation of the performance characteristics (such as breakthrough time and hazardous substance-specificity of the material or item) relevant to the requirements and limitations of the site.
  - † Task-specific conditions and durations.
- † The hazards and potential hazards of the site (see Table 8, Selecting PPE for Specific Hazards).
  - Select totally encapsulating chemical protective (TECP) suits that:
  - ♦ Maintain positive air pressure.
  - † Prevent inward test gas leakage of more than 0.5 percent.

Table 8		
Selecting PPE for Specific Hazards		
When	Use	

** Inhalation hazards could be present.	<ul> <li>₩ Positive-pressure (pressure-demand) self-contained breathing apparatus (SCBA)</li> <li>OR</li> <li>₩ A decreased level of respiratory protection only when the incident commander determines, from air monitoring results, that employees will be adequately protected.</li> </ul>
Chemical exposure levels will create a substantial possibility of:  ## Immediate death.  ## Immediate serious illness or injury.  ## Reduced ability to escape.	Either positive-pressure (pressure-demand):  SCBA  Air-line respirators equipped with an escape air supply.
Skin absorption of a hazardous substance may result in a substantial possibility of:  ## Immediate death.  ## Immediate serious illness or injury.  ## Reduced ability to escape.	Protection equivalent to Level A including a totally encapsulating chemical protective (TECP) suit.

WAC 296-307-45610 Control hazards created by personal protective equipment (PPE).

# You must:

- ## Control hazards created by the use of PPE, including:
- Heat stress due to extremely high temperatures.
- Any other employee health hazard and consideration.

# NEW SECTION

# WAC 296-307-45620 Use personal protective equipment (PPE) properly. You must:

- (1) Make sure employees inspect PPE before, during and after use, following your plan's procedures.
- (2) Make sure employees put on (don) and remove (doff) PPE following your plan's procedures.
- (3) Not interchange self-contained breathing apparatus (SCBA) air cylinders from different manufacturers, unless:
  - ## There is a life-saving emergency

## AND

You need a supplemental air supply

# AND

The cylinders are of the same capacity and pressure rating. (4) Make sure compressed air cylinders used with SCBAs meet the testing and service life requirements of the United States Department of Transportation (USDOT). Visit: http://www.dot.gov.

**Note:** You can also check with the cylinder manufacturers to obtain USDOT test and service life specifications.

## You must:

(5) Make sure PPE is maintained in a safe and reliable condition using your plan's procedures. PPE maintenance includes:

- **M** Decontamination
- # Cleaning
- # Inspection
- ## Identification of damage or defects
- ## Parts repair or replacement
- ₩ Storage or disposal.

# WAC 296-307-45800 Postemergency response.

## Important:

## Postemergency response is the stage of the emergency response where the immediate threat from the release has been stabilized or eliminated, and cleanup of the site has started.

## Except

- When cleanup is done by the employees who were part of the initial emergency response, the employees are not covered by this section (however, training, PPE and other requirements in WAC 296-307-45600 through 296-307-45620 apply to these employees).
- ₩ To determine which requirements apply to your postemergency response activities, follow Table 9, below.

Table 9 Rules that Apply to Postemergency Response Activities		
When postemergency response cleanup is performed by employees who were not part of the initial emergency response and:	The following rules or requirements apply:	
It is necessary to remove hazardous substances, health hazards and contaminated materials (example: Soil) from the site	Chapter 296-62 WAC, Part P, Hazardous waste operations and treatment, storage and disposal facilities.	
Cleanup is done on plant property using plant or workplace employees  AND  It is not necessary to remove hazardous substances, health hazards and contaminated materials from the site.	For training:  WAC 296-307-35015 and 296-307-35018,  Employee emergency action plans  Chapter 296-62 WAC, Part E, Respiratory protection  WAC 296-307-550, Employer chemical hazard communication  Other appropriate training requirements relevant to personal protective equipment (PPE) and decontamination  For equipment:  WAC 296-307-45800.	

# You must:

Maintain your clean-up equipment

Make sure that all equipment used for clean-up work is serviced and inspected before use when cleanup is done on plant property by plant or workplace employees.

 $WAC\ 296\mbox{-}307\mbox{-}46000$  Definitions. The following definitions are specific to this rule:

# Annually

Any twelve-month cycle.

## Buddy system

A system of organizing employees (who enter or stand by danger areas) into work groups, so each employee can be observed by at least one other member of the group. The purpose of this system is to provide rapid assistance to employees in an emergency.

## Clean-up operation(s)

An operation where hazardous substances are removed, contained, incinerated, neutralized, stabilized, cleared up or, in any other manner, processed or handled with the goal of making the site safer for people or the environment.

## Danger area

Areas where conditions pose a serious danger to employees, such as areas where:

- ## Immediately dangerous to life or health (IDLH) conditions could exist
- ₩ High levels of exposure to toxic substances could exist

OR

\*\* There is a potential for exceeding the lower explosive limit (LEL) or lower flammability limit (LFL) of a substance.

## Decontamination

Removing hazardous substances from employees and their equipment so potential adverse health effects will not occur. **Emergency response** 

An organized response to an anticipated release of a hazardous substance that is, or could become an uncontrolled release. **Emergency** response plan

A written plan that requires coordination between emergency response participants, and contains procedures, criteria, and other information that will be applied to emergency response operations. Each employer's plan should be compatible with local and state plans.

# Engineering controls

Methods of controlling employee exposures by modifying the source or reducing the quantity of contaminants.

# Hazardous materials team (HAZMAT team)

A group of employees who are expected to perform responses to releases, or possible releases, of hazardous substances for the purpose of control and stabilization. As a result of their duties, HAZMAT team members may have close contact with hazardous substances.

**Note:** A HAZMAT team may be a separate component of a fire brigade or fire department.

# Hazardous substance

Any of the following substances that could adversely affect an exposed employee's health or safety:

- ₩ Substances defined under section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) or "Superfund" Act (visit: http://www.epa.gov)
- ## Biological or other disease-causing agents released that could reasonably be expected to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations in a person or their offspring when

the person is:

- Directly exposed to the agent in the environment
- $\,$  Directly ingests, inhales, or assimilates the agent from the environment
  - Indirectly ingests the agent through a food chain
- ₩ Substances listed by the United States Department of Transportation as hazardous materials under Title 49 (Transportation) in the Code of Federal Regulations (CFR), Part 172, section 101 and appendices (visit: http://www.nara.gov and search for "List of CFR subjects")
  - ## Hazardous wastes as defined in this rule.

## Hazardous waste

A substance designated by chapter 173-303 WAC, Dangerous waste regulations, department of ecology, as a dangerous waste or an extremely hazardous waste and any waste fitting the definition of "health hazard" in this rule.

**Note:** For department of ecology regulations, visit: http://www.ecy.wa.gov

## Health hazard

A chemical, a mixture of chemicals, or a pathogen for which there is statistically significant evidence, based on at least one study conducted according to established scientific principles, that acute or chronic health effects may occur in exposed employees.

The term "health hazard" includes stress due to temperature extremes and chemicals that are:

- # Carcinogens
- ## Toxic or highly toxic agents
- # Reproductive toxins, irritants, corrosives, sensitizers,
  hepatotoxins, nephrotoxins, or neurotoxins
- # Agents acting on the hematopoietic system agents that damage lungs, skin, eyes, or mucous membranes. (Detailed definitions of these chemical terms can be found in the Safety and health core rules, WAC 296-307-550, chemical hazard communication.)

# Incident command system (ICS)

An organized approach to control and manage operations at an emergency response incident.

## Incidental release

A release that can be safely controlled at the time of the release and does not have the potential to become an uncontrolled release.

Note:

Example of a situation that results in an incidental release:

A tanker truck is receiving a load of hazardous liquid when a leak occurs. The driver knows the only hazard from the liquid is minor skin irritation. The employer has trained the driver on procedures and provided equipment to use for a release of this quantity. The driver puts on skin protection and stops the leak. A spill kit is used to contain, absorb, and pick up the spilled material for disposal.

# Immediately dangerous to life or health (IDLH)

Any atmospheric condition that would:

₩ Cause an immediate threat to life

OR

 $\hbox{\tt \#}$  Cause permanent or delayed adverse health effects

OR

# Interfere with an employee's ability to escape

# Limited action

Action necessary to:

₩ Secure an operation during emergency responses,

OR

# Prevent an incident from increasing in severity.

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Examples include shutting down processes and closing emergency valves.

# Lines of authority

A preestablished ranking of individuals, qualified to assume a commanding role during an emergency response, noted in an emergency response plan and implemented during a response. This is most important when responders from multiple employers could participate in an emergency response.

#### Must

Must means mandatory.

## Permissible exposure limit (PEL)

The exposure, inhalation, or dermal permissible limit specified in chapter 296-62 WAC, Part H, Air contaminants. Personal protective equipment (PPE)

Protective items designed to be worn by the user to protect them against airborne, skin contact and other hazards. This includes items such as respiratory protection, protective suits, gloves, eye protection, etc.

## Postemergency response

The stage of the emergency response where the immediate threat from the release has been stabilized or eliminated, and cleanup of the site has started.

## Published exposure level

Exposure limits published in "National Institute for Occupational Safety and Health (NIOSH) Recommendations for Occupational Safety and Health" (DHHS publication #92-100, 1992).

If an exposure limit is not published by NIOSH, then "published exposure level" means the exposure limits published by the American Conference of Governmental Industrial Hygienists (ACGIH) in "TLVs and BEIs-Threshold Limit Values for Chemical Substances and Physical Agents" (1999 edition).

Note:

Additional exposure levels published by recognized organizations such as the American Industrial Hygiene Association are not required to be observed by this rule; however, they may be a useful resource when a hazardous substance is not covered by NIOSH and ACGIH publications.

## Should

Should means recommended.

## Uncontrolled release

A release where significant safety and health risks could be created. Releases of hazardous substances that are either incidental or could not create a safety or health hazard (i.e., fire, explosion or chemical exposure) are not considered to be uncontrolled releases.

Note: 
# Examples of conditions that could create a significant safety and health risk:

- Large-quantity releases
- Small releases that could be highly toxic
- Airborne exposures that could exceed a WISHA permissible exposure limit or a published exposure limit and employees are not adequately trained or equipped to control the release.

Example of an uncontrolled release:

A forklift driver knocks over a container of a solvent-based liquid, releasing the contents onto the warehouse floor. The driver has been trained to recognize the vapor is flammable and moderately toxic when inhaled. The driver has not been trained or provided appropriate equipment to address this type of spill. In this situation, it is not safe for the driver to attempt a response. The driver needs to notify someone of the release so an emergency response can be initiated.

# Workplace

₩ A fixed facility

OR

₩ A temporary location (such as a traffic corridor)

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# Any other site where an emergency response occurs.